

FEB. 14 2006

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application of:

BURCH, MATTHEW C.


Serial No.: 10/071,560

Filed: February 8, 2002

SYSTEMS AND METHODS FOR TRACK  
LOG SELECTIONAttorney Docket No.:  
702.165

Group Art Unit No. 2164

Examiner: ORTIZ, BELIX M.

CERTIFICATE OF MAILING 37 C.F.R. 1.8	
I hereby certify that this correspondence is being sent by facsimile to 571-273-8300 on:	
2/14/06 Date	 Signature

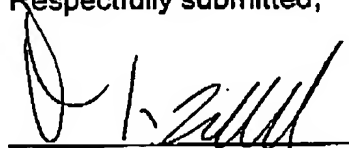
Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450**APPELLANTS' AMENDED BRIEF ON APPEAL**

In response to the Notice of Non-Compliant Appeal Brief dated January 24, 2006, Appellants' amended brief on Appeal in accordance with 37 C.F.R. § 41.37 is hereby submitted. The Examiner's rejections of claims 1-45 are herein appealed, and allowance of said claims is respectfully requested.

The requisite fee of \$500.00 as required by 37 C.F.R. § 41.20 was submitted August 3, 2005. Any additional fee which is due in connection with this brief should be applied against our Deposit Account No. 501-791.

Respectfully submitted,

By:

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**APPEAL BRIEF**

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Following are the requisite statements under 37 C.F.R. § 41.37:

**I. Real Party in Interest**

Matthew C. Burch is the inventor of the claimed invention. Mr. Burch assigned the above-referenced application to Garmin Ltd., the Real Party in Interest.

**II. Related Appeals and Interferences**

No related appeals or interferences are known to the Appellants which may directly affect or be directly affected on the Board's decision in the pending appeal.

**III. Status of Claims**

The application, as originally filed, contained 45 claims, with claims 1, 10, 14, 22, 31, and 39 being independent. Claims 1-45 were rejected under 35 USC § 102(e) as being anticipated by Ran, U.S. Patent No. 6,317,686, in a first Office Action dated July 16, 2004.

A response, containing no claim amendments, was filed November 19, 2004. Claims 1-45 were again rejected under 35 USC § 102(e) as being anticipated by Ran, U.S. Patent No. 6,317,686, in a second Office Action dated April 4, 2005. The second Action was made Final.

A response, containing no amendments, was filed on May 3, 2005. Applicant received an Advisory Action dated June 2, 2005.

Claims 1-45 remain as originally filed, stand rejected, and are on appeal.

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#### **IV. Status of Amendments**

All amendments submitted by the Appellant have been entered.

#### **V. Summary of Claimed Subject Matter**

Track logs are used in navigational aid devices to provide an indication of where the device has been. Specifically, track logs are arrays of points used to track a location of the navigational aid device. Track logs may be visualized as a trail of electronic bread crumbs, where each bread crumb is a track log point that identifies a position and a time the device was at that position. Thus, track logs are purely historical, since they provide an indication of where the device has been. Simply put, a track log, as described in the specification and used in the claims, is an electronic version of Hansel and Gretel's bread crumb trail, with each track log point equating to a dropped bread crumb.

Many navigational aid devices having Global Positioning System (GPS) capabilities record track logs. It is further known to facilitate selection of a track log by presenting a user with a menu that shows recorded start and/or end points. However, the present invention is not limited to selecting track logs by start and/or end points. Rather, the present invention allows a desired track log to be selected from any portion of a set of track log points, or even a time associated with a track log, thereby allowing more powerful and flexible applications for the navigational aid devices.

In one embodiment, a desired first endpoint and a desired second endpoint may be specified for a desired track log. These endpoints can be specified by a variety of

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methods, such as specifying a time or a location. The present invention can search for track logs containing the desired endpoints. It should be noted that the present invention seeks to identify the desired endpoint from anywhere within the track logs. In other words, the present invention is not limited to identifying track logs by their endpoints and can look within the track logs to individual points along the track log. If those exact points are not found, the present invention can search for track logs containing points close, in time and/or space, to the desired endpoints. In this manner, actual first and second endpoints are assigned based on the desired endpoints and an available set of track log points. Thus, the desired track log is identified using the actual first endpoint, the actual second endpoint, and at least one track log point.

For example, suppose a navigation device is used for navigation along several trips. A user of the device may wish to review those trips, which were actually taken, in order to, for example, plan a future trip, retrace their steps, and/or determine where they were at a specific point in time. With the present invention, the user may know, for example, that sometime over last year's Labor Day weekend their device created a track log while they traveled from Kansas City to Branson passing through Springfield, all in Missouri. In this example, suppose that user now wishes to retrace their steps, but only as far as Springfield. More specifically, suppose the user wishes to create a route from Kansas City to Springfield based on the trip they previously took, which may not be easily calculated using other methods such as shortest or fastest routing algorithms. Using the prior art, the user would only be able to extract the entire track log from Kansas City to Branson, and

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then only by specifying Kansas City and Branson as endpoints. Thus, using the prior art, the end result would be a route between Kansas City and Branson, which is not desired as it would not provide them with accurate estimates of their arrival in Springfield, among other problems.

The present invention allows the user to specify Kansas City and Springfield as endpoints, thereby allowing the user to extract only that portion of the track log between Kansas City and Springfield. Alternatively, the user can also extract only that portion of the track log between Kansas City and Springfield by specifying times and dates that they were in Kansas City and Springfield. In any case, the present invention is based on track logs, or electronic bread crumb trails, reflecting historical position and time recordings.

Specifically, claim 1 recites "specifying a desired first endpoint and a desired second endpoint for a desired track log" 330,434,438,534,634,734,834, "assigning an actual first endpoint for the track log based on the desired first endpoint and a set of track log points, and an actual second endpoint for the track log based on the desired second endpoint and the set of track log points" 436,440,536,636,736,836, and "identifying the desired track log using the actual first endpoint, the actual second endpoint, and at least one track log point, wherein at least one of the desired first endpoint and the desired second endpoint is capable of being specified by specifying a location" 332,432,532,632,732,832. See figures 3-8. Similarly, claim 14 recites "receive desired endpoints for a desired track log" 330,434,438,534,634,734,834, "assign actual endpoints for the track log based on the desired endpoints and a set of track log points" 436,440,536,636,736,836, and "identify the

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desired track log using the actual endpoints and at least one track log point, wherein at least one of the desired endpoints is capable of being specified by location" 332,432,532,632,732,832. *Id.* These limitations are discussed, among other places, on pages 7 and 8, with reference to figures 3 and 4. Further discussion may be found, among other places, on pages 8 and 9, with reference to figure 5. Finally, specifying endpoints by specifying a location is discussed, among other places, on pages 9 and 10, with reference to figure 6.

Claim 10 recites "selecting a method for specifying a time of at least one track log endpoint from a choice among: a method for specifying a location and extracting a time from the specified location, and at least one other method for specifying the time of at least one track log endpoint" 762,764,766,768,770,888,890,892, "specifying desired endpoints for a desired track log using one or more of the selected methods for specifying a time of at least one track log endpoint" 330,434,438,534,634,734,834,892, "assigning actual endpoints for the track log based on a time for the desired endpoints and a set of track log points" 436,440,536,636,736,836, and "identifying the desired track log using the actual endpoints and at least one track log point from the set of track log points" 332,432,532,632,732,832. See figures 3-8. Thus, much of the discussion on pages 7-10, with reference to figures 3-6, would also apply to claim 10. Furthermore, methods for specifying a time related to track log endpoints are discussed, among other places, on pages 10-12, with reference to figures 7 and 8.

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Claim 22 recites "a processor" 112,1910,1936 and "a memory adapted to communicate to the processor, wherein the memory includes a set of track log points, wherein the device is adapted to select a desired track log based on a first user-specified desired endpoint and a second user-specified desired endpoint, and wherein at least one of the first and second user-specified endpoints is capable of being selected by a user-specified location" 114,1930,1942,332,432,532,632,732,832,330,434,438,534,634,734, 834. See figures 1, 3-8, 19A, and 19B. Thus, much of the discussion on pages 7-10, with reference to figures 3-6, would also apply to claim 22. Furthermore, the processor and memory are discussed, among other places on pages 5 and 6, with reference to figure 1. Alternative embodiments are discussed, among other places, on pages 19-22, with reference to figures 19A and 19B.

Claim 31 recites "a processor" 112,1910,1936, "a memory adapted to communicate to the processor, wherein the memory includes a set of track log points" 114,1930,1942, and "wherein the device is adapted to: determine a user-selected method for specifying a time of at least one track log endpoint from a choice among: a method for specifying a location and extracting a time from the specified location, and at least one other method for specifying the time of at least one track log end point; receive user-specified desired endpoints for a desired track log using one or more of the methods for specifying a time of at least one track log endpoint; assign actual endpoints for the track log based on a time for the desired endpoints and a set of track log points; and identify the desired track log using the actual endpoints and at least one track log point from the set of track log points"



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762,764,766,768,770,888,890,892,330,434,438,534,634,734,834,892,436,440,536,636, 736,836,332,432,532,632,732,832. See figures 1, 3-8, 19A, and 19B. Thus, much of the discussion on pages 7-12, with reference to figures 3-8, would also apply to claim 31. Furthermore, the processor and memory are discussed, among other places on pages 5 and 6, with reference to figure 1. Alternative embodiments are discussed, among other places, on pages 19-22, with reference to figures 19A and 19B.

Finally, claim 39 recites "a mass data storage adapted to store navigation data, including at least one set of travel log points" 2012, "a server adapted to communicate with the mass data storage" 2002, and "a navigational aid device adapted to communicate with the server via a communication channel, such that the navigational aid device is capable of storing information on and retrieving information from the mass data storage; wherein the device is adapted to be transported, wherein the system is adapted to: receive desired endpoints for a desired track log; assign actual endpoints for the track log based on the desired endpoints and a set of track log points; and identify the desired track log using the actual endpoints and at least one track log point, wherein at least one of the desired endpoints is capable of being specified by location" 2016,762,764,766,768, 770,888,890, 892,330,434,438,534,634,734,834,892,436,440,536,636,736,836,332,432,532, 632,732, 832. See figures 3-8 and 20. Thus, much of the discussion on pages 7-10, with reference to figures 3-6, would also apply to claim 39. Furthermore, the mass data storage, server, and navigational aid device are discussed, among other places, on pages 22-26, with reference to figure 20.

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## **VI. Grounds of Rejection to be Reviewed on Appeal**

Claims 1-45 stand rejected under 35 U.S.C. 102(e) as being anticipated by Ran,  
U.S. Patent No. 6,317,686.

## **VII. Argument**

### **A. Summary of Ran Reference**

Ran teaches a system for predicting travel times along a proposed route between locations based on anonymous collections of real-time and historic traffic data. For example, as disclosed column 1, line 66, through column 2, line 25, Ran's system:

employs a computer model of a transportation route map, the route map having a multiplicity of possible destination points connected by route segments. ... An equation is developed for each route segment. The equation incorporates variables and constants which relate to the fixed and variable parameters which are indicative of the time it will take to travel along a particular route segment. The fixed parameters for a road would include the route segment's length, the posted speed limit, and the carrying capacity of the route segment. Variable factors include the time of day, day of week, day of year, number of vehicles predicted or measured to be moving along the route segment, the measured velocity of the vehicles, the type of driver, and type of vehicle for which a prediction of travel time is desired. In addition, there are variables which adjust the carrying capacity of the route segment, for example lane closures due to construction or accident.

As disclosed in column 19, lines 19-39:

The traffic prediction models 8 have two roles: 1) generate estimates of route segment speeds and travel times for the current time instant, and 2) produce prediction of route segment speeds and travel times for future time instants. Currently, the real-time speed and travel time data collected from field devices and probe vehicles only cover a small portion of the entire route segment network, typically major freeway segments in major urban areas. On the other hand, the historical speed and travel time data cover a larger

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## **VII. Argument**

### **A. Summary of Ran Reference**

Ran teaches a system for predicting travel times along a proposed route between locations based on anonymous collections of real-time and historic traffic data. For example, as disclosed column 1, line 66, through column 2, line 25, Ran's system:

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As disclosed in column 19, lines 19-39:

The traffic prediction models 8 have two roles: 1) generate estimates of route segment speeds and travel times for the current time instant, and 2) produce prediction of route segment speeds and travel times for future time instants. Currently, the real-time speed and travel time data collected from field devices and probe vehicles only cover a small portion of the entire route segment network, typically major freeway segments in major urban areas. On the other hand, the historical speed and travel time data cover a larger

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portion of the entire route segment network, typically freeway segments and arterials. Moreover, such historical speed and travel time data are not available for each time of day, day of week, week of month, and month of year. Nevertheless, a significant part of the route segment network will have no historical speed and travel time data. Such route segments include some rural freeways, minor arterials, surface streets, and residential streets. Therefore, it is the role to use the traffic prediction models to estimate the time-dependent travel times and speeds for each route segment for each time of day, day of week, week of month, and month of year.

As disclosed in column 1, Ran gets his historical data from many sources, such as "each state's Department of Transportation". Thus, the only historical information Ran discusses is essentially average travel times between two points, collected by governmental sources who would be prohibited from providing more specific position and time reports that would in any way resemble track logs. Rather, the historical information provided by these sources must be averages of transit times of anonymous travelers. Specifically, such averages are simply not analogous to, nor suggestive of, "track logs", as described in the specification and used in the claims. More specifically, such traffic data can only reflect an average of numerous trips involving numerous anonymous vehicles, and therefore cannot "provide an indication of where a specific device has been", as the present specification defines track logs.

Furthermore, rather than any specific discrete time or historical time period, Ran is strictly concerned with elapsed travel times between two points.

Simply put, Ran teaches a system for predicting travel times along a proposed route between locations based on averaged traffic data. In no way does Ran seek to select a specific track log, which documents a specific device's travel between specific points over

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a specific time period. Since Ran does not select such individual track logs, Ran simply cannot anticipate the claimed method for doing so.

### **B. Summary of Arguments**

Appellant respectfully submits that the Examiner's rejections should not be sustained because the cite Ran reference simply fails to anticipate the claimed invention.

### **C. Legal Discussion of Anticipation**

35 USCS § 102 Conditions for patentability; novelty and loss of right to patent

A person shall be entitled to a patent unless—

...

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language;

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP § 2131, citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). More specifically, "Federal Circuit decisions repeatedly emphasize that anticipation (lack of novelty) is established only if (1) all the elements of an invention, as stated in a patent claim, (2) are identically set forth, (3) in a single prior art

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reference". Chisum on Patents § 3.02. See also *Gechter v. Davidson*, 43 USPQ2d 1030, 1032 (Fed. Cir. 1997) ("Under 35 U.S.C. § 102, every limitation of a claim must identically appear in a single prior art reference for it to anticipate the claim.").

**D. The Examiner Failed To Establish A Prima Facie Case of Anticipation As The Cited Reference Fails To Disclose Each And Every Claimed Element Of The Present Invention.**

*Ran fails to disclose track logs.*

*and therefore fails to disclose identifying or validating track logs.*

As discussed above, Ran simply does not teach "track logs", as described in the specification and claimed in the claims. As Ran fails to teach "track logs", Ran also fails to teach other specific claim limitations, such as those related to track logs. For example, Ran simply does not disclose "specifying a desired first endpoint and a desired second endpoint **for a desired track log**", "assigning an actual first endpoint **for the track log** based on the desired first endpoint and **a set of track log points**, and an actual second endpoint **for the track log** based on the desired second endpoint and **the set of track log points**", and "identifying the desired **track log** using the actual first endpoint, the actual second endpoint, and at least one **track log point**", emphasis added, as claimed in claim 1. Rather, as discussed above, Ran simply discloses **predicting** travel times along a **proposed** route. Thus, Ran simply does not anticipate the limitations of claim 1.

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Similarly, as Ran does not teach "track logs", Ran does not teach "receive desired endpoints for a desired track log", "assign actual endpoints for the track log based on the desired endpoints and a set of track log points", and "identify the desired track log using the actual endpoints and at least one track log point", as claimed in claims 14 and 39. As discussed above, Ran simply does not anticipate track logs, much less discrete track log points or the other limitations of claims 14 and 39.

As Ran does not teach "track logs", Ran does not teach validating endpoints of a track log, as claimed in claims 2 and 20. As a result, Ran does not anticipate "validating the desired first endpoint and the desired second endpoint", as claimed in claim 2, or "validate the desired endpoints", as claimed in claim 20.

As Ran does not teach "track logs", Ran does not teach "wherein the memory includes a set of track log points" and "wherein the device is adapted to select a desired track log based on a first user-specified desired endpoint and a second user-specified desired endpoint", as claimed in claim 22, or "wherein the memory includes a set of track log points", "assign actual endpoints for the track log based on a time for the desired endpoints and a set of track log points", and "identify the desired track log using the actual endpoints and at least one track log point from the set of track log points", as claimed in claim 31. As discussed above, Ran simply does not anticipate track logs, much less discrete track log points or the other limitations of claims 22 and 31.

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*As Ran is only concerned with known and fixed travel segments.*

*Ran fails to disclose any method for filtering track logs.*

As Ran does not teach "track logs", Ran does not teach filtering track log points, as claimed in claims 3 and 21. Specifically, Ran is simply limited to analyzing data between fixed points. More specifically, Ran can only predict travel times between two known end points, and simply cannot perform any filtering of track log points.

For example, suppose a traveler wishes to predict a travel time between Kansas City and Saint Louis. Ran's system can utilize its traffic data to generate such a prediction. However, if Ran's traffic data includes only traffic data based on travel times between Kansas City and Saint Louis, Ran cannot accurately predict travel time for any intermediate points. Specifically, Ran cannot filter any data to generate a predicted travel time between Kansas City and Columbia, MO, for example. While it may be possible, for Ran's data to include more detailed segmenting, Ran would simply select the applicable segments, rather than filter any track log points, as described in the specification and claimed in the claims.

As a result, Ran does not anticipate "filtering track log points for the desired track log extending between the actual first endpoint and the actual second endpoint", as claimed in claim 3, or "filter track log points for a path extending between the actual first endpoint and the actual second endpoint", as claimed in claim 21.



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*As Ran is only concerned with elapsed times,*

*Ran fails to disclose associating a specific time with a specific location.*

Ran simply does not teach "identifying a time associated with the nearest track log point", as claimed in claim 4. Specifically, as described in the specification and used in the claims, "a time associated with [a] track log point" is, the time that a device was actually at a position associated with that track log point. Thus, the time associated with a track log point, as described in the specification and claimed in the claims, is a discrete time rather than an elapsed time between points.

In contrast, Ran is only interested in an elapsed time between points, rather than any specific time a device was at a specific point. As a result, Ran does not anticipate "searching for a nearest track log point that is located closest to at least one of the desired first endpoint and the desired second endpoint that is capable of being specified by specifying a location", "identifying a time associated with the nearest track log point", and "finding an index of the nearest track log point in a time range", as claimed in claim 4.

As Ran does not teach "track logs", or specific discrete times associated therewith, Ran does not teach "selecting a method for specifying a time of at least one track log endpoint", "specifying desired endpoints for a desired track log using one or more of the selected methods for specifying a time of at least one track log endpoint", "assigning actual endpoints for the track log based on a time for the desired endpoints and a set of track log points", and "identifying the desired track log using the actual endpoints and at least one track log point from the set of track log points", as claimed in claim 10. As discussed

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above, Ran simply does not anticipate track logs, much less discrete times associated with track log endpoints or the other limitations of claim 10.

Similarly, Ran does not teach "selecting a track log endpoint from a list of track log points that are associated with a time", as claimed in claim 11, "entering a time that is used to identify the at least one track log endpoint", as claimed in claim 12, "identifying a time associated with the nearest track log point", as claimed in claim 13, Claim 36 recites "display a list of track log points that are associated with a time", as claimed in claim 36, or "identify a time associated with the nearest track log point", as claimed in claim 38. Specifically, claims 11, 12, 13, 36, and 38 have limitations directed to discrete times, rather than elapsed times, such as Ran's predicted and historical travel times. As a result, Ran simply does anticipate the limitations of claims 11, 12, 13, 36, and 38.

#### **E. Conclusion**

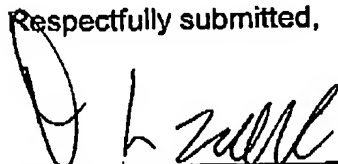
The Examiner failed, with regard to the rejection of the pending claims under 35 U.S.C. §102(e), to establish the requisite prima facie case of anticipation by failing to identify a reference that teaches each and every claimed element of the present invention. As the Examiner failed to establish the requisite prima facie case of anticipation, the rejections under 35 U.S.C. § 102(e) cannot be sustained and must be overturned.

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Accordingly, reversal of the Examiner's rejections is proper, and such favorable action is solicited.

Respectfully submitted,

By:



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## VIII. Appendix

1. (Original) A method, comprising:  
specifying a desired first endpoint and a desired second endpoint for a desired track log;  
assigning an actual first endpoint for the track log based on the desired first endpoint and a set of track log points, and an actual second endpoint for the track log based on the desired second endpoint and the set of track log points; and  
identifying the desired track log using the actual first endpoint, the actual second endpoint, and at least one track log point,  
wherein at least one of the desired first endpoint and the desired second endpoint is capable of being specified by specifying a location.
2. (Original) The method of claim 1, further comprising validating the desired first endpoint and the desired second endpoint.
3. (Original) The method of claim 1, further comprising filtering track log points for the desired track log extending between the actual first endpoint and the actual second endpoint.

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4. (Original) The method of claim 1, wherein assigning an actual first endpoint for the track log based on the desired first endpoint and a set of track log points, and an actual second endpoint for the track log based on the desired second endpoint and the set of track log points includes:

searching for a nearest track log point that is located closest to at least one of the desired first endpoint and the desired second endpoint that is capable of being specified by specifying a location;  
identifying a time associated with the nearest track log point; and  
finding an index of the nearest track log point in a time range.

5. (Original) The method of claim 1, further comprising selecting a method for specifying a location for at least one of the desired first endpoint and the desired second endpoint, wherein the selected method for specifying the location is capable of being used to specify the location for at least one of the desired first end point and the desired second endpoint.

6. (Original) The method of claim 5, wherein selecting a method for specifying a location includes manually entering a location.

7. (Original) The method of claim 5, wherein selecting a method for specifying a location includes specifying a location using a map feature.

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8. (Original) The method of claim 5, wherein selecting a method for specifying a location includes specifying a location using an address.
9. (Original) The method of claim 5, wherein selecting a method for specifying a location includes specifying a location using a waypoint.
10. (Original) A method for selecting a track log from a set of track log points, comprising:
  - selecting a method for specifying a time of at least one track log endpoint from a choice among:
    - a method for specifying a location and extracting a time from the specified location, and
    - at least one other method for specifying the time of at least one track log endpoint;
  - specifying desired endpoints for a desired track log using one or more of the selected methods for specifying a time of at least one track log endpoint;
  - assigning actual endpoints for the track log based on a time for the desired endpoints and a set of track log points; and
  - identifying the desired track log using the actual endpoints and at least one track log point from the set of track log points.

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11. (Original) The method of claim 10, wherein at least one other method for specifying the time of at least one track log endpoint includes selecting a track log endpoint from a list of track log points that are associated with a time.

12. (Original) The method of claim 10, wherein at least one other method for specifying the time of at least one track log endpoint includes entering a time that is used to identify the at least one track log endpoint.

13. (Original) The method of claim 10, wherein assigning actual endpoints for the track log based on a time for the desired endpoints and a set of track log points includes:

searching for a nearest track log point that is located closest to at least one of the desired endpoints;

identifying a time associated with the nearest track log point; and

finding an index of nearest track log point in a time range.

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14. (Original) A computer-readable medium having computer-executable instructions adapted to:

receive desired endpoints for a desired track log;

assign actual endpoints for the track log based on the desired endpoints and a set of track log points; and

identify the desired track log using the actual endpoints and at least one track log point,

wherein at least one of the desired endpoints is capable of being specified by location.

15. (Original) The computer-readable medium of claim 14, wherein the at least one of the desired endpoints that is capable of being specified by location is capable of being specified by a time associated with the location.

16. (Original) The computer-readable medium of claim 14, wherein the at least one of the desired endpoints that is capable of being specified by location is capable of being specified using a manually-entered location.

17. (Original) The computer-readable medium of claim 14, wherein the at least one of the desired endpoints that is capable of being specified by location is capable of being specified using a map feature.



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18. (Original) The computer-readable medium of claim 14, wherein the at least one of the desired endpoints that is capable of being specified by location is capable of being specified using an address.

19. (Original) The computer-readable medium of claim 14, wherein the at least one of the desired endpoints that is capable of being specified by location is capable of being specified using a waypoint.

20. (Original) The computer-readable medium of claim 14, wherein the computer-executable instructions are further adapted to validate the desired endpoints.

21. (Original) The computer-readable medium of claim 14, wherein the computer-executable instructions adapted to identify the desired track log using the actual endpoints and at least one track log point include computer-readable instructions adapted to filter track log points for a path extending between the actual first endpoint and the actual second endpoint.

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22. (Original) A navigational aid device, comprising:  
a processor; and  
a memory adapted to communicate to the processor,  
wherein the memory includes a set of track log points,  
wherein the device is adapted to select a desired track log based on a first user-specified desired endpoint and a second user-specified desired endpoint,  
and  
wherein at least one of the first and second user-specified endpoints is capable of being selected by a user-specified location.
23. (Original) The device of claim 22, wherein the device includes a portable device.
24. (Original) The device of claim 22, wherein the device includes a cellular phone.
25. (Original) The device of claim 22, wherein the device includes a Global Positioning System (GPS) receiver device.
26. (Original) The device of claim 22, wherein the device includes a Personal Digital Assistant (PDA).

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27. (Original) The device of claim 22, wherein at least one of the first and second user-specified endpoints is capable of being selected by manually entering a location.

28. (Original) The device of claim 22, wherein at least one of the first and second user-specified endpoints is capable of being selected by using a map feature.

29. (Original) The device of claim 22, wherein at least one of the first and second user-specified endpoints is capable of being selected by using an address.

30. (Original) The device of claim 22, wherein at least one of the first and second user-specified endpoints is capable of being selected by using a waypoint.

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31. (Original) A navigational aid device, comprising:

a processor; and

a memory adapted to communicate to the processor,

wherein the memory includes a set of track log points,

wherein the device is adapted to:

determine a user-selected method for specifying a time of at least one track log endpoint from a choice among: a method for specifying a location and extracting a time from the specified location, and at least one other method for specifying the time of at least one track log endpoint;

receive user-specified desired endpoints for a desired track log using one or more of the methods for specifying a time of at least one track log endpoint;

assign actual endpoints for the track log based on a time for the desired endpoints and a set of track log points; and

identify the desired track log using the actual endpoints and at least one track log point from the set of track log points.

32. (Original) The device of claim 31, wherein the navigational aid device includes a portable navigational aid device.

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33. (Original) The device of claim 31, wherein the navigational aid device includes a wireless communication device.

34. (Original) The device of claim 31, wherein the navigational aid device includes a Global Positioning System (GPS) receiver device.

35. (Original) The device of claim 31, wherein the navigational aid device includes a Personal Digital Assistant (PDA).

36. (Original) The device of claim 31, wherein:  
the device is further adapted to display a list of track log points that are associated with a time, and  
the at least one other method for specifying the time of at least one track log endpoint includes selecting a track log endpoint from the list of track log points.

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37. (Original) The device of claim 31, wherein:
- the device is further adapted to display a data entry screen for entering time; and
- the at least one other method for specifying the time of at least one track log endpoint includes entering a time that is to be associated with the at least one track log endpoint.
38. (Original) The device of claim 31, wherein the device is further adapted to:
- search for a nearest track log point that is located closest to at least one of the desired endpoints that is specified by a location;
- identify a time associated with the nearest track log point; and
- find an index of the nearest track log point in a time range.

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39. (Original) A system, comprising:

a mass data storage adapted to store navigation data, including at least one set of  
travel log points;

a server adapted to communicate with the mass data storage; and

a navigational aid device adapted to communicate with the server via a  
communication channel, such that the navigational aid device is capable of  
storing information on and retrieving information from the mass data storage;

wherein the device is adapted to be transported,

wherein the system is adapted to:

receive desired endpoints for a desired track log;

assign actual endpoints for the track log based on the desired endpoints and  
a set of track log points; and

identify the desired track log using the actual endpoints and at least one  
track log point,

wherein at least one of the desired endpoints is capable of being specified by  
location.

40. (Original) The navigation system of claim 39, wherein the communication channel  
includes a wireless channel.

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41. (Original) The navigation system of claim 39, wherein the server includes a remote server.

42. (Original) The navigation system of claim 39, wherein the server includes a processor adapted to respond to a request from the navigational aid device by performing calculations on the navigation data and transmitting the results to the navigational aid device.

43. (Original) The navigation system of claim 39, wherein the navigational aid device is adapted to communication with and retrieve navigation data from the server using streaming data.

44. (Original) The navigation system of claim 39, wherein the navigational aid device is adapted to communication with and retrieve navigation data from the server using cellular communications technology.

45. (Original) The navigation system of claim 39, wherein:  
the navigational aid device includes a processor in communication with a memory  
and a display; and  
the processor and the memory of the navigational aid device are adapted to  
cooperate to display the desired track log on the display.